

In re Application of:
Frank Paetzold et al.
Application No.: 09/929,516
Filed: August 13, 2001
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PATENT
Docket No.: EYEM1340

REMARKS

In the pending Office Action, claims 1-16 rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. patent number 6,320,583 to Shaw et al. in view of U.S. patent number 5,608,839 to Chen.

Applicants respectfully traverse each of the rejections and respectfully request reconsideration of this application in light of the following remarks.

The rejection of claim 1 as allegedly unpatentable over the Shaw patent in view of the Chen patent is respectfully traversed. Applicant respectfully asserts that the Shaw patent and the Chen patent fail to disclose or suggest all of the features recited in amended claim 1. The Shaw patent discloses tracking of facial features using markers attached to the face. See, column 18, line 18 through column 19, line 42. Claim 1, as amended, recites "providing a plurality of visual-facial-animation values based on tracking, without using markers attached to the actor's face, of facial features in the sequence of facial image frames of the speaking actor". The Shaw patent fails to disclose or suggest tracking of facial features without using markers attached to the actor's face. The Chen patent fails to disclose facial feature tracking and, therefore, likewise fails to disclose or suggest tracking of facial features without using markers attached to the actor's face. Accordingly, Applicant respectfully asserts that amended claim 1 defines patentable advances over the Shaw patent in view of the Chen patent. For these reasons, the rejection of independent claim 1, under 35 U.S.C. § 103(a), is improper and should now be withdrawn.

Applicant asserts that the amendments to claims 1 and 9 and supporting language in the amended paragraphs of the specification are supported by language in U.S. patent number 6,272,231 at column 1, lines 22-43 and column 3, lines 8-12. The entire disclosure of U.S. patent number 6,272,231 was incorporated by reference into the original specification of the above-identified patent application at page 5, lines 15-16.

The rejections of dependent claims 2-8, which depend on independent claim 1, as allegedly unpatentable over the Shaw patent in view of the Chen patent are respectfully traversed.

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In addition to the particular features recited in each claim, claims 2-8 include the features recited in independent claim 1 but not disclosed or suggested by the Shaw patent and the Chen patents. Also, with respect to claim 4, the Examiner asserts that "Kalman filter are an extremely well known type of filter and one of ordinary skill in the art would have known to use them for their known benefits in the art (Official Notice, see MPEP 2144.03)". Applicants respectfully traverse the Examiner's "well known" assertion and "Official Notice" noting that claim 4 recites Kalman filtering of the respective mouth-associated values of the plurality of visual facial animation values and the respective mouth-associated values of the plurality of audio facial animation values to produce output facial animation values. The Examiner impermissibly fails to provide a factual finding supported by sound technical and scientific reasoning to support the conclusion of common knowledge related to Kalman filtering of facial animation values. Based on Applicants' traversal of the Examiner's "well known" assertion and "Office Notice", Applicants request that the Examiner provide documentary evidence in the next Office Action to support of the Examiner's position if the rejection of claim 4 is to be maintained. See MPEP 2144.03(C). With respect to claims 7 and 8, the Examiner asserts that "wavelet transforms are an extremely conventional way to transform and present data (Official Notice, see MPEP 2144.03)". Applicants respectfully traverse the Examiner's "well known" assertion and "Official Notice" noting that claims 7 and 8 relate to tracking of facial features. The Examiner impermissibly fails to provide a factual finding supported by sound technical reasoning and scientific reasoning to support the conclusion of common knowledge related to the use of wavelet transforms in the tracking of facial feature. Based on Applicants' traversal of the Examiner's "well known" assertion and "Office Notice", Applicants request that the Examiner provide documentary evidence in the next Office Action to support of the Examiner's position if the rejections of claims 7 and 8 are to be maintained. See MPEP 2144.03(C). Accordingly, for these reasons, and the reasons recited with respect to independent claim 1, dependent claims 2-8 define patentable

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advances over the Shaw patent in view of the Chen patent and the rejections of claims 2-8 under 35 U.S.C. § 103(a) should now be withdrawn.

The rejection of independent claim 9 as allegedly unpatentable over the over the Shaw patent in view of the Chen patent is respectfully traversed. Applicant respectfully asserts that the Shaw patent and the Chen patent fail to disclose or suggest all of the features recited in amended claim 9. The Shaw patent discloses tracking of facial features using markers attached to the face. See, column 18, line 18 through column 19, line 42. Claim 9, as amended, recites "means for providing a plurality of visual-facial-animation values based on tracking, without using markers attached to the speaking actor's face, of facial features in the sequence of facial image frames of the speaking actor". The Shaw patent fails to disclose or suggest means for providing a plurality of visual-facial-animation values based on tracking of facial features without using markers attached to the actor's face. The Chen patent fails to disclosure facial feature tracking and, therefore, likewise fails to disclose or suggest means for providing a plurality of visual-facial-animation values based on tracking of facial features without using markers attached to the actor's face. Accordingly, Applicant respectfully asserts that amended claim 9 defines patentable advances over the Shaw patent in view of the Chen patent. For these reasons, the rejection of independent claim 9 under 35 U.S.C. § 103(a), is improper and should now be withdrawn.

The rejections of dependent claims 10-16, which depend on independent claim 9, as allegedly unpatentable over the Shaw patent in view of the Chen patent are respectfully traversed. In addition to the particular features recited in each claim, claims 10-16 include the features recited in independent claim 9 but not disclosed or suggested by the Shaw patent and the Chen patent. Also, claims 12, 15 and 16 recite features similar to the features recited in claims 4, 7 and 8, respectively, and Applicants similarly traverse the Examiner's "well known" assertion and "Official Notice" made with respect to claims 12, 15 and 15. Accordingly, for these reasons, and the reasons recited with respect to independent claim 9, dependent claims 10-16 define patentable

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advances over the Shaw patent in view of the Chen patent and the rejections of claims 10-16 under 35 U.S.C. § 103(a) should now be withdrawn.

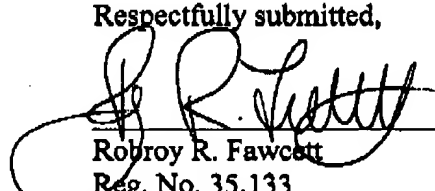
Acknowledgement is requested for the domestic priority claim to U.S. Patent Application Serial No. 09/871,370, made by Preliminary Amendment submitted December 7, 2001.

CONCLUSION

In view of the above amendments and remarks, reconsideration and prompt evaluation of all pending claims are respectfully requested. If any questions or issues remain, the Examiner is invited to contact the undersigned at the telephone number set forth below so that prosecution of this application can proceed in an expeditious fashion.

Respectfully submitted,

Date: April 28, 2004


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